

REMARKS

Reconsideration and further examination of this application are hereby requested. Claims 1-22 and 35 are currently pending in the application. Claims 23-34 and 36 have been canceled.

A. CLAIM INTERPRETATION

There appears to be an issue in interpreting one term in the claims as amended. It is respectfully submitted that clarifying this issue will alleviate many of the claim rejections of the present office action.

In construing patent claims, common, simple English words whose meaning is clear and unquestionable (i.e., in the absence of an indication that their use in a particular context changes their meaning) are construed to mean exactly what they say. In other words, plain meaning construction is the presumptive rule. See M.P.E.P. § 2111.01 (8th ed., rev. 5 2006).

The word "each" arises in independent claims 1, 11, and 35 and has apparently been interpreted in the present office action to mean "some." Applicant submits that this interpretation is not justified given the common meaning of the term "each." The term "each" is used as a pronoun in the independent claims. The ordinary plain meaning of the pronoun "each" is defined as:

every one of a group considered individually.

American Heritage® Dictionary of the English Language, 576 (3d ed. 1996).

The office action interprets the security server of He '824 as being a functional equivalent of the claimed intelligent network interface. Regardless of the functional similarities between the security server disclosed by He '284 and the claimed intelligent network interface, it is important not to lose sight of the fact that the claims recite plural intelligent network interfaces, and in fact an intelligent network interface between the network and each node. By ignoring this claim language, claimed elements and their relative arrangement would be read out of the claim. The "all elements" legal test not only requires that a single prior art reference disclose all the recited elements, but also that those elements be disclosed in the same arrangement as is claimed; absent such prior art disclosure there is no anticipation. *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 894, 221 U.S.P.Q. 669, 673 (Fed. Cir. 1984); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

B. ANTICIPATION

Claims 1-15, 19, 20, 22, and 35 have been rejected under 35 U.S.C. § 102(b) as being anticipated by He '824 (U.S. Pat. No. 5,944,824). This rejection is respectfully traversed based on the following arguments.

CLAIMS 1, 10, AND 35

In order for a patent claim to be anticipated by the prior art, each and every limitation of that claim must be found (either expressly or inherently) within the four corners of a single prior art reference. See M.P.E.P. § 2131 (8th ed., rev. 5 2006).

Independent method claim 1 recites:

providing an intelligent network interface between
a network and each node on the network

at lines 3 and 4. Independent method claim 10 recites (refer to lines 4 and 5) a similar step. Independent method claim 35 also recites (refer to lines 3 and 4) a similar step. Although the He '824 reference shows a security server between a network and some of its nodes, this prior art disclosure does not provide a teaching of doing so for each of its nodes.

He '824 does not contain a general teaching of providing an intelligent network interface between a network and each node on that network. In the illustrated embodiments, some nodes (e.g., user nodes 14 of Fig. 1) are shown as being connected to the network 10 without being provided with security server between the network 10 and the user node 14. If some are disclosed as not having it provided, then the disclosure does not read on the limitation that it is provided for each. In fact this points out a different architecture than that which is claimed in the present application.

For the above reasons, Applicant respectfully submits that the He '824 reference does not anticipate claims 1, 10, and 35, nor claims 2-9 depending therefrom.

CLAIMS 2, 4, AND 5

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Method claim 2 recites:

each intelligent network interface providing protocol translation based on servlets provided by said CMC.

See claim 2 at lines 2 and 3. Claims 4 and 5 recite additional aspects of this method step. Nowhere does He '824 teach or suggest a CMC dynamically distributing servlets.

Although elements of He '824 may act as gateways or bridges (i.e., the terminal servers 24), no code is distributed from a CMC. In the context of the He '824 disclosure, this lack of code distribution makes sense. In He '824, the Security Server 15 provides authorization, user privilege control, user access auditing, data integrity, etc., so it has no need to distribute code to perform such services as protocol translation, proxies, firewalls, auditing, policy enforcement, and web filtering.

For the above further reasons, Applicant respectfully submits that the He '824 reference does not anticipate claims 2, 4, and 5.

CLAIM 3

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Method claim 3 recites:

protocol translation is selected from the any two protocols within a single layer of an ISO 7 layer protocol stack.

See claim 3 and lines 2 and 3. Although He '824 discloses an IP network does not disclose protocol translation within a layer or the distribution of servlets to provide the translation.

For the above further reasons, Applicant respectfully submits that the He '824 reference does not anticipate claim 3.

CLAIM 6

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Method claim 6 recites:

said CMC dynamically distributing servlets to intelligent network interfaces based on node, said servlets selected from the group consisting of fault tolerance automatic rollover servlets, gateway intrusion detection servlets, multi-level firewall servlets, machine diagnostics servlets, virus scanning servlets, and security patching servlets.

See claim 6 at lines 2-7.

The examiner concedes that the security server of He '824 performs all network security functions for the network. This is

the opposite of the claimed method, where the security functions are performed by the decentralized intelligent network interfaces.

For the above further reasons, Applicant respectfully submits that the He '824 reference does not anticipate claim 6.

CLAIM 7

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Method claim 7 recites:

including a Security Parameters Index (SPI) for said connection that uniquely identifies said connection between said first and second intelligent network interfaces.

See claim 7 at lines 25-28. The Examiner notes that He '824 discloses use of KERBEROS. However, the KERBEROS encryption authentication system does not go so far as to anticipate the claimed use of an IPSec Security Parameters Index to uniquely identify a connection between two of the claimed invention's intelligent network interfaces.

For the above further reasons, Applicant respectfully submits that the He '824 reference does not anticipate claim 7.

CLAIM 9

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Method claim 9 recites:

providing a plurality of CMCs on said network in a hierarchical configuration.

See claim 9 at lines 2 and 3. The He '824 reference does not teach plural CMCs in a hierarchical configuration.

He '824 discloses a single Security Server that contains a plurality of security mechanisms. This has nothing to do with providing a plurality of CMCs in a hierarchical configuration, and in fact is a quite divergent teaching in that it centralizes multiple functions rather than distributing them among plural devices.

For the above reasons, Applicant respectfully submits that the He '824 reference does not anticipate claim 9.

CLAIM 11

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Independent apparatus claim 11 recites:

an intelligent network interface between each host device and said network

at lines 4 and 5. Although the He '824 reference shows a security server between a network and some of its nodes, this prior art disclosure does not provide a teaching of an intelligent network device between the network each of its host devices.

He '824 does not contain a general teaching of providing an intelligent network interface between a network and each host device connected to that network. In the illustrated embodiments, some host devices (e.g., user nodes 14 of Fig. 1) are shown as being connected to the network 10 without there being a security server between the network 10 and the user node 14. If some are disclosed as not having it provided, then the disclosure does not read on the limitation that it is present for each.

For the above reasons, Applicant respectfully submits that the He '824 reference does not anticipate claim 11, nor claims 12-22 depending therefrom.

CLAIMS 12 and 19

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Apparatus claim 12 recites (refer to lines 2-6) that an "intelligent network interface" includes a CPU, memory, and two I/O interfaces. Claim 19 recites additional aspects of this structure.

It is noted that that the CPU, memory and interfaces are expressly recited as parts of the intelligent network interfaces, not the user computer. This arrangement of elements is not disclosed by He '824. It is this arrangement of structure that

allows the intelligent network interfaces to operate transparently and in isolation from standard user applications. The CPU and memory are used in intelligent network interfaces because it is the primary enforcement point for network security policies. He '824 does not place the public in possession of this claimed arrangement, and thus does not provide such advantageous results.

For the above further reasons, Applicant respectfully submits that the He '824 reference does not anticipate claims 12 and 19.

CLAIMS 13, 14, and 20

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Apparatus claims 13, 14, and 20 each recite hardware or software aspects of the "intelligent network interface" that define the distinct properties of the intelligent network interface that make it capable of enforcing policy on a peer to peer basis independent of a central security server other than receiving policy requirements. The terminal server taught by He '824 is simply an interface to support communication with a central security server and perform some limited part of security functions based on security server direction about a specific session.

For the above further reasons, Applicant respectfully submits that the He '824 reference does not anticipate claims 13, 14, and 20.

CLAIM 15

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Apparatus claim 15 recites:

each intelligent network interface further comprises a serial line authentication port.

See claim 15 at lines 1-3. Each user node or device of He '824 does not have its own intelligent network interface. Simply because the terminal server of He '824 has a serial interface does not mean it has a "serial line authentication port" as required by the claim. In contrast to the claimed invention, according to the He '824 disclosure authentication is performed at security server 15 such that there is no need for authentication (or an authentication port) at terminal server 24.

For the above further reasons, Applicant respectfully submits that the He '824 reference does not anticipate claim 15.

CLAIM 22

Each and every limitation of a claim must be found (either expressly or inherently) within a single prior art reference in order to be anticipated. M.P.E.P. at § 2131.

Apparatus claim 22 recites:

a set of dynamically distributable code fragments stored on said CMC for distribution to said intelligent network interfaces

at lines 3-5. He '824 lacks any disclosure of dynamically distributed code fragments. Although He '824 makes mention of distribution of data for security, there is no disclosure of dynamically distributed code fragments.

For the above further reasons, Applicant respectfully submits that the He '824 reference does not anticipate claim 22.

C. OBVIOUSNESS

CLAIM 16

Claim 16 has been rejected under 35 U.S.C. § 103(a) as being obvious over He '824 in view of Liu '136 (U.S. Pat. No. 6,171,136). This rejection is respectfully traversed based on the following arguments.

In order to establish a *prima facie* case of obviousness, the prior must teach or suggest all the recited claim limitations. That is because the claim must be considered as a whole. See M.P.E.P. § 2143 (8th ed., rev. 5 2006).

As discussed above in part B of these Remarks (note discussion of independent claim 11 and dependent claims 12 and 15, from which claim 16 depends), the He '824 reference fails to disclose claim limitations regarding an intelligent network interface between each host device and said network, CPU, memory and interface structures, and limitations regarding serial line

authentication port. Considered together with He '824, the disclosure of Liu '136 does not providing a teaching or suggestion for all of the above-noted missing limitations of the deficient He '824 reference.

For the above reasons, Applicant respectfully submits that He '824 and Liu '136, considered together, do not establish a *prima facie* case of obviousness with respect to claim 16.

CLAIM 17

Claim 17 has been rejected under 35 U.S.C. § 103(a) as being obvious over He '824 in view of He '824 alone. This rejection is respectfully traversed based on the following arguments.

In order to establish a *prima facie* case of obviousness, the prior must teach or suggest all the recited claim limitations. That is because the claim must be considered as a whole. M.P.E.P. at § 2143.

As discussed above in part B of these Remarks (note discussion of independent claim 11 and dependent claim 12, from which claim 17 depends), the He '824 reference fails to disclose claim limitations regarding an intelligent network interface between each host device and said network, and CPU, memory and interface structures. The He '824 reference itself provides no teaching or suggestion for all of the above-noted missing limitations noted in the above non-anticipation arguments concerning claims 11 and 12. A suggestion is particularly

lacking in view of the fact that He '824 takes a philosophically different approach (centralized versus distributed) that is at odds with and teaches away from the claimed invention.

Furthermore, claim 17 recites a "parallel port authentication port" in the intelligent network interface. Although He '824 discloses a serial port on a terminal server 24, and discloses authorization on a security server 15, nowhere is there a suggestion of a parallel port authentication port in an intelligent network interface.

For the above reasons, Applicant respectfully submits that He '824 does not establish a *prima facie* case of obviousness with respect to claim 17.

CLAIM 18

Claim 18 has been rejected under 35 U.S.C. § 103(a) as being obvious over He '824 in view of Kitazaki '936 (U.S. Pat. No. 6,172,936). This rejection is respectfully traversed based on the following arguments.

In order to establish a *prima facie* case of obviousness, the prior must teach or suggest all the recited claim limitations. That is because the claim must be considered as a whole. M.P.E.P. at § 2143.

As discussed above in part B of these Remarks (note discussion of independent claim 11 and dependent claim 12, from which claim 18 depends), the He '824 reference fails to disclose

claim limitations regarding an intelligent network interface between each host device and said network, and CPU, memory and interface structures. Considered together with He '824, the disclosure of Kitazaki '936 does not providing a teaching or suggestion for all of the above-noted missing limitations of the deficient He '824 reference.

Furthermore, claim 18 recites a combination of "flash memory" for an operating system and "dynamic memory" for applications in the intelligent network interface. The Examiner concedes that He '824 does not disclose this recited feature. The Kitazaki '936 reference discloses that OS and applications use the same flash memory (see 14b of Fig. 1), and thus teaches away from the claim limitation.

For the above reasons, Applicant respectfully submits that He '824 and Kitazaki '936, considered together, do not establish a *prima facie* case of obviousness with respect to claim 18.

CLAIM 21

Claim 21 has been rejected under 35 U.S.C. § 103(a) as being obvious over He '824 in view of Walter '677 (U.S. Pat. No. 6,151,677). This rejection is respectfully traversed based on the following arguments.

In order to establish a *prima facie* case of obviousness, the prior must teach or suggest all the recited claim limitations. That is because the claim must be considered as a whole.

M.P.E.P. at § 2143.

As discussed above in part B of these Remarks (note discussion of independent claim 11, from which claim 21 depends), the He '824 reference fails to disclose claim limitations regarding an intelligent network interface between each host device and said network. Considered together with He '824, the disclosure of Walter '677 does not providing a teaching or suggestion for all of the above-noted missing limitations of the deficient He '824 reference.

For the above reasons, Applicant respectfully submits that He '824 and Walter '677, considered together, do not establish a *prima facie* case of obviousness with respect to claim 21.

D. CLOSING

For the above reasons, Applicant respectfully submits that the application is in condition for allowance with claims 1-22 and 35. If there remain any issues that may be disposed of via a telephonic interview, the Examiner is kindly invited to contact the undersigned at the local exchange given below.

AMENDMENT UNDER 37 C.F.R. § 1.111
Appln. No. 10/068,776

PATENT APPLICATION

The Director of the U.S. Patent & Trademark Office is authorized to charge any necessary fees, and conversely, deposit any credit balance, to Deposit Account No. 18-1579.

Respectfully submitted,
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